



PATENT
ATTORNEY DOCKET NO.: 056291-5057

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of:)
)
STOCKER et al.)
)
Appln. No.: 09/963,686) Group Art Unit: 1624
)
Filed: September 27, 2001) Examiner: Raymond, Richard L.
)
FOR: HETEROCYCLIC DERIVATIVES WHICH)
INHIBIT FACTOR Xa)

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, **Mail Stop Amendment**
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Date: February 28, 2005

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(c)

Attached is a Form PTO-1449 listing the documents previously submitted or cited by the Examiner in parent Application No. 09/297,768. Accordingly, no copies of the listed documents are provided herewith. Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form.

This Information Disclosure Statement is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to fully comply.

03/02/2005 HGUTEMAI 00000023 500310 09963686

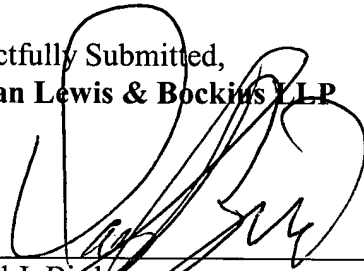
03 FC:1806 180.00 DA

Please charge the Rule 17(p) official fee required by Rule 97(c) to our Deposit Account No. 50-0310 under Order No. 056291-5057. **Authorization for the Commissioner to charge Deposit Account No. 50-0310 for payment of the Rule 17(p) official fee required by Rule 97(c) is being filed with an Amendment (Fee) Transmittal Form filed concurrently herewith.**

Consideration of the foregoing and enclosures plus the return of a copy of the herewith filed Form PTO-1449 with the Examiner's initials in the left column per MPEP 609 along with an early action on the merits of this application are earnestly solicited.

Except for issue fees payable under 37 C.F.R. §1.18, the Director is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. §1.136(a)(3).

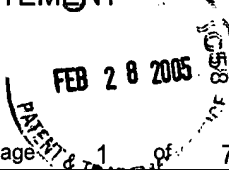
Respectfully Submitted,
Morgan Lewis & Bockius LLP



By:

Donald J. Bird
Registration No. 25,323
Tel. No.: (202) 739-5320
Fax No.: (202) 739-3001

Date: February 28, 2005
Morgan Lewis & Bockius LLP
Customer No. 09629
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Tel. No.: 202-739-3000
DJB:mk

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office		Atty. Dkt. No.	Client/Matter No.	Client Ref.
			056291-5057	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT 		Applicant: STOCKER et al.		
		Appln. No.: 09/963,686		
		Filing Date: September 27, 2001		
		Examiner: Richard L. Raymond	Group Art Unit: 1624	
Date: February 28, 2005		Page 1 of 7		

U.S. PATENT DOCUMENTS

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	4,167,567	09/1979	McCall			
	BR	4,231,938	11/1980	Monaghan et al.			
	CR	4,537,896	08/1985	Claeson et al.			
	DR	4,564,610	01/1986	Rahtz et al.			
	ER	4,629,728	12/1986	Regnier et al.			
	FR	4,788,196	11/1988	Cross et al.			
	GR	4,806,536	02/1989	Cross et al.			
	HR	4,835,165	05/1989	Cross et al.			
	IR	4,840,963	06/1989	Shepard et al.			
	JR	4,968,704	11/1990	Cross et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	KR	10177/92	07/1992	Australia	Frei et al.				
	LR	0 097 630 A2	01/1984	EPA	Claeson et al.				
	MR	0 232 740 A1	08/1987	EPA	Ueda et al.				
	NR	0 233 051	08/1987	EPA	Cross et al.				
	OR	0 244 115	11/1987	EPA	Cross et al.				
	PR	0 308 337	09/1989	EPA	Ninomiya et al.				
	QR	0 324 421 A2	07/1989	EPA	Biller				
	RR	0 352 946 A1	01/1990	EPA	Gymer et al.				
	SR	0 359 389	03/1990	EPA	Cross et al.				

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

TR	Boissier et al., "Synthesis and Pharmacological Study of New Piperazine Derivatives...Benzylpiperazines", J. Med. Chem., Sept. 1963, pp. 541-544				
UR	Bowers Nemia et al., "Synthetic Routes to 3-Pyrrolidinol", Synth. Comm. 13(13):1117-1123 (1983)				
VR	Budavari: Merck Index, Vol. 11 ED., 1989, See Monograph numbers 804 and 2807				

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT BY APPLICANT ALL CITED IN USP 3,300,330	Atty. Dkt. No.	Client/Matter No.	Client Ref.
		056291-5057	
	Applicant: STOCKER et al.		
	Appln. No.: 09/963,686		
	Filing Date: September 27, 2001		
Date: February 28, 2005	Page 2 of 7	Examiner: Richard L. Raymond	Group Art Unit: 1624

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	5,032,604	07/1991	Baldwin et al.		
	BR	5,138,058	08/1992	Geisen et al.		
	CR	5,254,563	10/1993	Huth et al.		
	DR	5,332,822	07/1994	Misra		
	ER	5,364,865	11/1994	Diana		
	FR	5,371,091	12/1994	Misra et al.		
	GR	5,411,971	05/1995	Emonds-Alt et al.		
	HR	5,556,977	09/1996	Wayne et al.		
	IR	5,563,141	10/1996	Wayne et al.		

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	JR	0 409 413	01/1991	EPA	Edwards et al.				
	KR	0 495 750	07/1992	EPA	Frei et al.				
	LR	0 515 240 A1	11/1992	EPA	Emonds-Alt et al.				
	MR	0 519 449 A1	12/1992	EPA	De Cillis et al.				
	NR	0 555 824 A1	08/1993	EPA	Heckel et al.				
	OR	0 576 941 A1	01/1994	EPA	Matyus et al.				
	PR	0 608 759 A2	08/1994	EPA	Gante et al.				
	QR	2 697 252 A1	04/1994	France	Binet et al.				X
	RR	1 449 100	07/1976	GB	Thomae				

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

SR	Cattel et al., "Drug design based on biosynthetic studies: synthesis, biological activity, and kinetics of new inhibitors of 2,3-oxidosqualene cyclase and squalene epoxidase", Steroids, vol. 53, no. 3-5, 1989, pp. 363-391, XP000611661				
TR	Caulkett et al., Chemical Abstracts. Vol. 131:322629				
UR	Chambers et al., "Preparation of arylpyridine compounds for treating leukotriene-related diseases", Chemical Abstracts, Abstract No. 139113, Vol. 119 (1993)				

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Atty. Dkt. No.	Client/Matter No.	Client Ref.			
					056291-5057				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT ALL CITED IN USP 3,300,330				Applicant: STOCKER et al.					
				Appln. No.: 09/963,686					
				Filing Date: September 27, 2001					
				Examiner: Richard L. Raymond		Group Art Unit: 1624			
Date: February 28, 2005				Page 3 of 7					
U.S. PATENT DOCUMENTS									
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)		
	AR	5,580,881	12/1996	Binet et al.					
	BR	5,606,065	01/1997	Emonds-Alt et al.					
	CR	5,681,954	10/1997	Yamamoto et al.					
	DR	5,795,893	08/1998	Bondinell et al.					
	ER	5,856,326	05/1999	Anthony et al.					
**	FR	6,022,869	02/2000	Faull et al.					
	GR	6,037,343	03/2000	Ali					
FOREIGN PATENT DOCUMENTS						English Abstract		Translation Readily Available	
		Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed		No
	HR	39 05 364 A1	08/1990	Germany	Geisen et al.				
	IR	39 43 225 A	06/1991	Germany	Huth et al.				X
	JR	42 43 858 A1	06/1994	Germany	Pieper et al.				
	KR	43 06 506 A1	09/1994	Germany	Heck et al.				
	LR	92/08709	05/1992	WIPO	Sturzebecher et al.				
	MR	92/18478	10/1992	WIPO	Long et al.				
	NR	93/06085	04/1993	WIPO	Chambers et al.				
	OR	94/18185	08/1994	WIPO	Sturzebecher et al.				
	PR	94/20467	09/1994	WIPO	Von der Salle et al.				
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)									
	QR	Conway et al., "Approaches to the Generation of 2,3-Indolyne", Heterocycles, 1992, 34(11) pp. 2095-2108							
	RR	Cross et al., "Preparation of N-[(heterocyclylmethoxy)phenyl] sulfamides and analogs as antiarrhythmics", Chemical Abstracts, Abstract No. 231211, Vol. 113 (1989)							
	SR	Deratani et al., "Synthesis of new dialkylaminopyridine acylation catalysts and their attachment to insoluble polymer supports", Polymer, April 1987, pp. 825-830							
	TR	Jucker, "Über C-substituierte Piperazinderivate", Helv. Chim. Acta., 45:2383-2042 (1962)							
Examiner						Date Considered:			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.									

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office		Atty. Dkt. No.	Client/Matter No.	Client Ref.
			056291-5057	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT ALL CITED IN USP 3,300,330		Applicant: STOCKER et al.		
		Appln. No.: 09/963,686		
		Filing Date: September 27, 2001		
Date: February 28, 2005	Page 4 of 7	Examiner: Richard L. Raymond		Group Art Unit: 1624

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR						
BR						
CR						

FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	DR	94/20468	09/1994	WIPO	Leinert et al.				
	ER	94/22835	10/1994	WIPO	Wayne et al.				
	FR	96/05189	02/1996	WIPO	Sturzebecher et al.				
**	GR	96/10022	04/1996	WIPO	Faull				
	HR	96/26196	08/1996	WIPO	Lowe et al.				
	IR	96/30343	10/1996	WIPO	Anthony et al.				
	JR	96/33171	10/1996	WIPO	Artico et al.				
**	KR	97/06802	02/1997	WIPO	Brown et al.				
**	LR	97/28128	08/1997	WIPO	Brown et al.				

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

MR	Hibino et al., "N-Phenysulfonylindole derivatives", Chemical Abstracts, 118:147461, April, 1993				
NR	Jain et al., "Compounds Acting on the Central Nervous System, VII. Studies in 1-Pyridyl-1-substituted Piperazines. A New Class of Anticonvulsants", J. Med. Chem., Sept. 1967, pp. 812-818				
OR	Kataoka et al., Chemical Abstracts, vol. 123, No. 14, 2 October 1995, Columbus, Ohio, U.S.; Abstract No. 179521d, "Homopiperazines as cell migration inhibitors", XP002081582, see abstract & JP 95 145060 A (Tejin Ltd)				
PR	Kato et al., "Reactivities of 4-Chloropyridine Derivatives and Their 1-Oxides", Chem. Pharm. Bull., 15:1343-1348 (1967)				
QR	Kato et al., "Studies on Ketene and Its Derivatives. LXXVI. ¹ H Reactions of Acetoacetamide and β -Aminocrotonamide and β -Diketone, β -Ketoaldehyde and Related Compounds", Chem. Pharm. Bull., 24(2):303-309 (1976)				

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Atty. Dkt. No.	Client/Matter No.	Client Ref.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT ALL CITED IN USP 3,300,330				056291-5057			
				Applicant: STOCKER et al.			
				Appln. No.: 09/963,686			
				Filing Date: September 27, 2001			
Date: February 28, 2005		Page 5 of 7		Examiner: Richard L. Raymond		Group Art Unit: 1624	

U.S. PATENT DOCUMENTS							
Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR						
	BR						
	CR						

FOREIGN PATENT DOCUMENTS							English Abstract		Translation Readily Available	
		Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed	No	Enclose	No
**	DR	97/28129	08/1997	WIPO	Smithers et al.					
**	ER	97/29104	08/1997	WIPO	Faull					
	FR	97/30971	08/1997	WIPO	Maduskuie et al.					
**	GR	98/06705	02/1998	WIPO	Brown et al.					
**	HR	98/21188	05/1998	WIPO	Preston et al.					
	IR									

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)										
	JR	Kobayashi et al., Chemical Abstracts, Vol. 132:194391								
	KR	Mitsunobu et al., "Preparation of Carboxylic Esters and Phosphoric Esters by the Activation of Alcohols", Bull. Chem. Soc. Jpn., 44(12):3427-3430 (1971)								
	LR	Nowak et al., Chemical Abstracts, Vol. 131:337034								
	MR	Kettner et al., "The Selective Inhibition of Thrombin by Peptides of Boroarginine", The Journal of Biological Chemistry, Vol. 265, No. 30, pp. 18289-18297 (1990)								
	NR	Kobayashi et al., Chemical Abstracts, Vol. 130:296694								
	OR	Prasad et al., "Antiamoebic Action of Drugs and Synthetic Compounds Against Trophozoites of Entamoeba Histoltica Under Axenic and Polyxenic Culture Conditions and in the Infected Rat Caecum", Curr. Sci., August 1984, pp. 778-781								
	PR	Ratouis et al., "Synthesis and Pharmacological Study of New Piperazine Derivatives, II. Phenethylpiperazines", J. Med. Chem., Jan. 1965, pp. 104-107								
	QR	Sartori et al., "Synthesis and analgesic activities of urea derivatives of α -amino-N-pyridyl benzene propanamide", Eur J. Med Chem (1994), pp. 431-439								

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Atty. Dkt. No.	Client/Matter No.	Client Ref.	
					056291-5057		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT ALL CITED IN USP 3,300,330				Applicant: STOCKER et al.			
				Appln. No.: 09/963,686			
				Filing Date: September 27, 2001			
Date: February 28, 2005		Page 6 of 7		Examiner: Richard L. Raymond		Group Art Unit: 1624	

U.S. PATENT DOCUMENTS							
Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)	
	AR						
	BR						
	CR						

FOREIGN PATENT DOCUMENTS							English Abstract		Translation Readily Available	
		Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed	No	Enclose	No
	DR									
	ER									
	FR									

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)										
GR	Sato et al., "Synthetic Studies on Cardiovascular Agents. III. Synthesis of Pyrano-[2,3-c]pyrazoline Derivatives", Yakugaku Zasshi, Vol. 98(3), 1978, pp. 335-348									
HR	Saxena et al., "Quantitative Structure Activity Relationship in 3-4 Disubstituted Pyridines & 1-(3"-Amino-4"pyridyl)-4-arylpiperazines", Indian J. Chem., Vol. 19B, October, 1980, pp. 873-878									
IR	Smith et al., "Fibrin, Red Cell and Platelet Interactions in an Experimental Model of Thrombosis", Br. J. Pharmac., Vol. 77, pp. 29-38 (1982)									
JR	Sundberg et al., "Synthesis with N-Protected 2-Lithioindoles", J. Org. Chem., 1973, 38(19) 3324-3330									
KR	Szmant et al., "Concerning the Variable Character of the Sulfone Group", J. Amer. Chem. Soc., Vol. 78, pp. 3400-3403 (1956)									
LR	Tabacik et al., "Squalene expoxidase, oxido-squalene cyclase and cholesterol biosynthesis in normal and tumoral mucosa of the human gastrointestinal tract. Evidence of post-HMGACoA regulation", Biochim. Biophys. Acta, Vol. 666, No. 3, 1982, pp. 433-441, XP000610864									
MR	Take et al., Chemical Abstracts, Vol. 133:58814									
NR	Tawada et al., Chemical Abstracts, Vol. 130:38404									
OR	Tawada et al., Chemical Abstracts, Vol. 131:170361									

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce Patent and Trademark Office				Atty. Dkt. No.	Client/Matter No.	Client Ref.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT ALL CITED IN USP 3,300,330				056291-5057			
				Applicant: STOCKER et al.			
				Appln. No.: 09/963,686			
				Filing Date: September 27, 2001			
Date: February 28, 2005		Page 7 of 7		Examiner: Richard L. Raymond		Group Art Unit: 1624	

U.S. PATENT DOCUMENTS							
Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)	
AR							
BR							
CR							

FOREIGN PATENT DOCUMENTS							English Abstract		Translation Readily Available	
Document Number	Date MM/YYYY	Country	Inventor Name	Class	Sub Class	Filing Date	Enclosed	No	Enclose	No
DR										
ER										
FR										

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)							Class	Sub Class	Filing Date
GR	Vigroux et al., "Cyclization-Activated Prodrugs: N-(Substituted 2-hydroxyphenyl and 2-hydroxypropyl)carbamates Based on Ring-Opened Derivatives of Active Benzoxazolones and Oxazolidones as Mutual Prodrugs of Acetaminophen", J. Med. Chem., Vol. 38, pp. 3983-3994 (1995)								
HR	Vogel et al., "Comparison of Experimental Thrombosis Models In Rats Effects of Four Glycosaminoglycans", Thrombosis Research, Vol. 54, No. 5, pp. 399-410 (1989)								
IR	Von G. Krüger, et al., "(Thomae et al.) Arzneim.-Forsch., Synthesen von N-Benzyl-aminocarbonsäuren und thren Derivaten", (Synthesis and N-benzylaminocarboxylic acids and their derivatives), Vol. 23(2a), pp. 290-295								
JR	Wallis, "Inhibitors of Coagulation Factor Xa: From Macromolecular Beginnings to Small Molecules", Current Opinion in Therapeutic Patents, August, 1993, pp. 1173-1179								
KR	Yokoyama et al., "Palladium-catalyzed cross-coupling reaction: direct allylation of aryl bromides with allyl acetate", Tetrahedron Letters, Vol. 26, No. 52, 195, pp. 6457-6460, XP002081581 Oxford GB, pp. 6458-64569: compound 7								
LR	Zagral et al., "Amino acids and peptides. LIX. Synthesis and some biological properties of L-DABB-vasopressin", Collec. Czech. Chem. Commun., Vol. 31, 1966, pp. 90-95, XP002081879, see compound 11, page 95.								

Examiner	Date Considered:
----------	------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.